

PATENT CLAIMS

1. A method for optimizing the number of power outputs of an electronic control device of the application specific integrated circuit type (1) mounted onto a printed circuit board (2), the number of power outputs required depending on the application, characterized in that it consists in mounting into two packages (4, 5) having geometrically identical connecting configurations, an integrated circuit of a first type comprising a first number of power outputs and an integrated circuit of a second type comprising a second number of power outputs, respectively, in such a manner as to make said two circuits compatible for their installation on the printed circuit board (2), and to provide at least two locations on the board for the installation of said two packages (4, 5), the number of power outputs required for the application being obtained by installing in said locations at least two circuits chosen from between said integrated circuit of the first type and said integrated circuit of the second type.

2. The method as claimed in claim 1, characterized in that the integrated circuit of the first type and the integrated circuit of the second type are designed to have a difference of two outputs.

3. The method as claimed in either of claims 1 and 2, characterized in that the integrated circuits of the first type and of the second type are encapsulated within a package of the PQFN type.

4. The method as claimed in any one of claims 1 to 3, characterized in that the integrated circuits of the first type and of the second type are encapsulated within a package of the QFN type.

5. An electronic control device of the application specific integrated circuit type (1) mounted onto a printed circuit board (2), said device comprising a stage (3) with power outputs whose number depends on the application targeted, characterized in that said power output stage comprises at least two circuits over which the required number of power outputs is distributed, said two circuits being chosen from a set comprising an integrated circuit of a first type comprising a first number of power outputs and an integrated circuit of a second type comprising a second number of power outputs, said circuits of the first and of the second type being respectively mounted into two packages (4, 5) having geometrically identical connection configurations, in such a manner as to make said two circuits compatible for their installation on the printed circuit board.

6. The device as claimed in claim 5, characterized in that the integrated circuit of the first type comprises six power outputs.

7. The device as claimed in either one of claims 5 and 6, characterized in that the integrated circuit of the second type comprises eight power outputs.

8. The device as claimed in any one of claims 5 to 7, characterized in that the integrated circuit of the first type comprises one eight-amp output, three three-amp outputs and two one-amp outputs.

9. The device as claimed in any one of claims 5 to 8, characterized in that the integrated circuit of the second type comprises one eight-amp output, four three-amp outputs and three one-amp outputs.